

ABSTRACT OF THE DISCLOSURE

Described is apparatus and a process for the enablement of functional product analysis of the headspace proximate one or more substrate, such as hair, fabric or skin, surfaces having affixed thereto functional product, a fragrance composition and/or malodour counteractant composition-containing microcapsules. The apparatus employs mobile microcapsule-abrading solid objects, including agitating stainless steel spheres during analyte collection in a gas-flow/trapping tube analyte collection apparatus. The reciprocating motion and the air-flow are commenced simultaneously thereby enabling the solid objects to become mobile and to effectively abrade the microcapsules affixed to the semi-solid surfaces. The volatile substance contained in the microcapsules is then emitted from the resulting ruptured microcapsules into the headspace above them, and the air flow carries the volatile substance molecules into the trapping means, which is then subjected to extraction followed by analysis of the extract, such as gas chromatography, mass spectral analysis, infra-red analysis and NMR analysis.